

Title (en)

Apparatus for bending hollow frames for isolating glass.

Title (de)

Vorrichtung zum Biegen von Hohlprofileisten zu Abstandhalterrahmen für Isolierglas.

Title (fr)

Dispositif pour plier des profilés d'écartement creux pour double vitrage.

Publication

EP 0449801 B1 19931118 (DE)

Application

EP 91890054 A 19910321

Priority

- AT 74290 A 19900330
- AT 184090 A 19900910

Abstract (en)

[origin: US5181412A] Apparatus for bending hollow profiles 3 into spacer frames for insulating glass panes, the hollow profile 3 being advanced by a gripper 2 displaceable along a conveyor 4. The magnitude of the stepwise advance of the hollow profile 3 corresponds to the lengths of the legs of the spacer frame to be made. A pickup 6 on the gripper 2 measures precisely each stepwise advance.

IPC 1-7

B21D 53/74; **B21D 11/10**

IPC 8 full level

B21D 43/10 (2006.01); **B21D 53/74** (2006.01); **C03C 27/06** (2006.01); **E06B 3/66** (2006.01); **E06B 3/673** (2006.01)

CPC (source: EP US)

B21D 53/74 (2013.01 - EP US); **E06B 3/67313** (2013.01 - EP US); **E06B 2003/67395** (2013.01 - EP US)

Cited by

CN111633081A; WO2020070245A1

Designated contracting state (EPC)

CH DE DK ES FR GB IT LI SE

DOCDB simple family (publication)

US 5181412 A 19930126; DE 4109549 A1 19911010; DE 4109549 C2 19940127; DE 59100592 D1 19931223; DK 0449801 T3 19931227; EP 0449801 A2 19911002; EP 0449801 A3 19911106; EP 0449801 B1 19931118; ES 2046883 T3 19940201; JP H04228234 A 19920818; JP H0724890 B2 19950322; NO 179683 B 19960819; NO 179683 C 19961127; NO 911111 D0 19910320; NO 911111 L 19911001

DOCDB simple family (application)

US 67758191 A 19910329; DE 4109549 A 19910322; DE 59100592 T 19910321; DK 91890054 T 19910321; EP 91890054 A 19910321; ES 91890054 T 19910321; JP 8578891 A 19910327; NO 911111 A 19910320